

# The Challenge of Individual Income Tax Reform: An Economic Analysis of Tax Base Broadening

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## **Summary**

Congressional interest in a major reform of the individual income tax that would broaden the base and use the additional tax revenues to lower rates and/or reduce the deficit has increased. The President's Fiscal Commission, for example, proposed an individual income tax reform with three objectives: to broaden the base and lower the tax rate, to contribute to deficit reduction, and to maintain or increase the progressivity of the tax system. The Fiscal Commission proposed to broaden the tax base by eliminating or modifying most tax expenditures. One legislative proposal in the 112<sup>th</sup> Congress, S. 727, introduced by Senators Wyden, Begich, and Coats, would broaden the tax base by eliminating many tax expenditures and reduce tax rates.

One way to broaden the tax base is to eliminate or reduce tax expenditures, which have been in the tax code since the passage of the progressive income tax in 1913. An understanding of four complex issues surrounding tax expenditures is necessary for an informed debate over broadening the tax base. First, tax expenditures affect the economic behavior of taxpayers (efficiency effects). Second, changing tax expenditures will change the distribution of tax benefits, and the distribution of after-tax income (equity effects). Third, changes to tax expenditures could change the administrative burdens on taxpayers and the Internal Revenue Service (IRS). Lastly, many tax expenditures are popular among taxpayers and voters. Each one of these issues presents challenges to broadening the tax base, which could be difficult to overcome.

There are over 200 separate tax expenditures, which are projected to total over \$1.1 trillion in FY2014. The revenue loss of all tax expenditures, however, is highly concentrated in a relatively small number—the largest 20 tax expenditures account for 90% of the total revenue loss of all tax expenditures. This amount is equivalent to 74% of the total FY2014 revenue from individual income taxes. If used for rate reduction alone, eliminating these tax expenditures could allow tax rates to be reduced by around 43%: for example, the top 39.6% tax rate could be reduced to approximately 23%.

When evaluating tax expenditures as potential base broadening provisions, it is useful to consider the general kinds of behaviors they affect or the general objectives in determining the feasibility of eliminating or modifying specific tax expenditures. Consequently, tax expenditures are divided into seven major categories: saving, business investment, consumption, owner-occupied housing (which is a combination of an investment choice and a consumption choice), labor supply, government programs (which in many cases would have no behavioral effects but are simply income transfers), and a category termed structural (which provides benefits based on family circumstances rather than affecting behavior).

The analysis in this report suggests there are impediments to base broadening by eliminating or reducing tax expenditures, because they are viewed as serving an important purpose, are important for distributional reasons, are technically difficult to change, or are broadly used by the public and quite popular. Given the barriers to eliminating or reducing most tax expenditures, it may prove difficult to gain more than \$100 billion to \$150 billion in additional tax revenues through base broadening. This amount could have a significant effect on reducing the FY2014 budget deficit—reducing the projected \$345 billion deficit by 30% to 43%. This additional tax revenue, however, is equivalent to about 6% to 9% of projected FY2014 individual income tax revenue, and, consequently, would not allow for significant reductions in tax rates (about a one or two percentage point reduction for each bracket).

# **Contents**

Tax Expenditures and Base Broadening	3
Allocational and Efficiency Effects	7
Saving	
Business	
Owner-Occupied Housing	11
Consumption	14
Health	14
Charitable Contributions	16
Labor Supply	17
Government	
Exemption of Medicare and Social Security Benefits	
Subsidies for State and Local Governments: Deductions for Income Taxes and	
Exclusion of Tax Exempt Bonds	
Structural	
Other Notable Tax Expenditures	19
Distributional Issues	21
Saving	22
Housing	
Consumption	
Labor Supply	
Government	24
Structural	24
Administrative and Technical Challenges	24
Health Benefits	
Pension Benefits	
Saving	
Other Tax Expenditures	
Public Attitudes Towards Tax Reform	
Concluding Remarks	
Concluding Remarks	21
T!	
Figures	
Figure B-1. Concentration Curves: Itemized Deductions	21
Figure B-2. Concentration Curves: Income Exclusions	
Figure B-3. Concentration Curves: Tax Credits and Preferential Tax Rates	33
Tables	
Table 1. Tax Expenditures by Category of Economic Effect, FY2014	1
Table 2. The 20 Largest Individual Tax Expenditures, FY2014	
Table 3. The 20 Largest Individual Tax Expenditures, FY2014, with Expiring Provision	
Extended	6

Table 4. Additional Tax Expenditures Not Among the Top 20, With a Cost of \$1 Billion or More, FY2014	19
Table 5. Progressivity of Selected Tax Provisions: The Suits Index	22
Appendixes	
Appendix A. Classification of Tax Expenditures by Category	29
Appendix B. Data and Methods	30
Contacts	
Author Information	34

Interest in a major reform of the individual income tax that would broaden the base and use the additional tax revenues to lower rates and/or reduce the deficit has increased. The President's Fiscal Commission, for example, proposed an individual income tax reform with three objectives: to broaden the base and lower the rates, to contribute to deficit reduction, and to maintain or increase the progressivity of the tax system. The Fiscal Commission, a bipartisan group, proposed a major revision that would eliminate or modify most tax expenditures. The Fiscal Commission also proposed to use revenues to eliminate aspects of the income tax that have come under criticism, such as the alternative minimum tax. A congressional proposal from the 112th Congress for income tax reform and base broadening was S. 727, introduced by Senators Wyden, Begich, and Coats.

One way to broaden the tax base is to eliminate or reduce tax expenditures, which have been in the tax code since the passage of the progressive income tax in 1913.<sup>4</sup> An understanding of four complex issues surrounding tax expenditures is necessary for an informed debate over broadening the tax base.<sup>5</sup> First, tax expenditures affect the economic behavior of taxpayers (efficiency effects). Second, changing tax expenditures will change the distribution of tax benefits and the distribution of after-tax income (equity effects). Third, changes to tax expenditures could change the administrative burdens on taxpayers and the Internal Revenue Service (IRS). Lastly, many tax expenditures are popular among taxpayers and voters. Each one of these issues presents challenges to broadening the tax base, which could be difficult to overcome.

Proposals have also been made to reform the corporate income tax, and the two reform efforts are related since changes in provisions measuring business income (such as depreciation rules) would likely apply in both cases. This report, however, does not focus on corporate tax reform, which is reviewed in other reports,<sup>6</sup> but a brief discussion of individual business-related provisions and their connection to corporate tax reform is included. There are also proposals for the revision of other existing taxes (such as the payroll tax or excise taxes), for transformation of the income tax into a consumption tax, or for new revenue sources, which are discussed in other reports.<sup>7</sup>

<sup>&</sup>lt;sup>1</sup> Tax reform usually refers to a broad change of the tax system rather than a piecemeal change in law such as changing tax rates. For a discussion, see C. Eugene Steuerle, "Tax reform, federal," in *The Encyclopedia of Taxation and Tax Policy*, ed. Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, 2<sup>nd</sup> ed. (Washington: The Urban Institute Press, 2005), pp. 421-424.

<sup>&</sup>lt;sup>2</sup> The National Commission on Fiscal Responsibility and Reform, *The Moment of Truth*, December 2010, http://www.fiscalcommission.gov/sites/fiscalcommission.gov/files/documents/TheMomentofTruth12\_1\_2010.pdf.

<sup>&</sup>lt;sup>3</sup> See CRS Report R41591, *Tax Reform: An Overview of Proposals in the 112<sup>th</sup> Congress*, by James M. Bickley; CRS Report R41970, *Addressing the Long-Run Budget Deficit: A Comparison of Approaches*, by Jane G. Gravelle; and CRS Report R41641; *Reducing the Budget Deficit: Tax Policy Options*, by Molly F. Sherlock. The provisions of the Wyden-Gregg bill from the 111<sup>th</sup> Congress, which were identical with one exception to S. 727 (112<sup>th</sup>), were estimated by the Joint Committee on Taxation, posted at http://wyden.senate.gov/imo/media/doc/Score.pdf.

<sup>&</sup>lt;sup>4</sup> Tax expenditures are defined under the Congressional Budget and Impoundment Control Act of 1974 (P.L. 93-344) as "revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability."

<sup>&</sup>lt;sup>5</sup> For an introduction to tax expenditures and an explanation on their role in the federal tax system, see CRS Report RL33641, *Tax Expenditures: Trends and Critiques*, by Thomas L. Hungerford; CRS Report RL34622, *Tax Expenditures and the Federal Budget*, by Thomas L. Hungerford; and CRS Report RL32808, *Overview of the Federal Tax System*, by Molly F. Sherlock and Donald J. Marples.

<sup>&</sup>lt;sup>6</sup> See CRS Report RL34229, *Corporate Tax Reform: Issues for Congress*, by Jane G. Gravelle and Thomas L. Hungerford; and CRS Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle. For a discussion of revisions focused on the tax treatment of foreign source income, see CRS Report RL34115, *Reform of U.S. International Taxation: Alternatives*, by Jane G. Gravelle.

<sup>&</sup>lt;sup>7</sup> CRS Report R41602, Should the United States Levy a Value-Added Tax for Deficit Reduction?, by James M. Bickley;

Is it possible to repeal or substantially trim most special tax deductions, credits, exclusions, and special rates, also known as tax expenditures? If so, the potential for lower rates or additional revenue would be significant. For FY2014, the year used in analyzing these provisions, individual income tax expenditures, which account for most of the potential base broadening provisions, are projected to total over \$1.1 trillion. This amount is equivalent to 74% of the total FY2014 revenue from individual income taxes, and about 7% of GDP.8 If used for rate reduction alone, eliminating these tax expenditures could allow tax rates to be reduced by around 43%. For example, the top 39.6% tax rate could be reduced to about 23%.9 If the additional revenue were also used to repeal the alternative minimum tax (which would require about 16% of the revenue), 10 tax rates could be reduced by almost 40%. As developed further in this report, however, it appears unlikely that a significant fraction of this potential revenue could be realized.

Experience from the last four decades suggests that major individual income tax reform is difficult to achieve. Prior to the Fiscal Commission study in the current Obama Administration, major income tax reform was addressed in the Ford, Reagan, and George W. Bush Administrations. Of the three, only the Reagan Administration proposal resulted in legislation, the Tax Reform Act of 1986. Moreover, although the 1986 act was considered a major tax reform, and made significant changes in the corporate tax, the base broadening in the individual income tax was quite limited.

This report examines large tax expenditures and considers the challenges in achieving significant base broadening, whether to finance rate reductions or other revisions to the tax code, or to reduce the deficit. Some special tax benefits may be fulfilling desirable objectives. For example, 30% of the revenue loss of tax expenditures is from provisions directed at encouraging savings, and many policy makers and analysts believe that taxes on savings should not be increased. Other tax expenditures, such as the exclusion of capital gains on owner-occupied housing, have important economic justifications.

In addition, a number of tax expenditures, accounting for about 11% of the total revenue loss, benefit lower-income individuals, including the exclusion of benefits such as Social Security and

and CRS Report R41591, Tax Reform: An Overview of Proposals in the 112th Congress, by James M. Bickley.

<sup>&</sup>lt;sup>8</sup> Estimates of Tax Expenditures from Joint Committee on Taxation, *Estimates Of Federal Tax Expenditures For Fiscal Years 2011-2015* JCS-1-12, January, 2012, http://www.jct.gov/publications.html?func=startdown&id=4386 with adjustments to deal with transitory effects such as bonus depreciation and exclusion of negative expenditures. Income tax revenues in dollar amounts and as a percent of GDP from Congressional Budget Office, *The Budget and Economic Outlook: Fiscal Years 2012-2022*, January 2011, http://www.cbo.gov/ftpdocs/126xx/doc12699/01-31-2012\_Outlook.pdf. Adding up tax expenditures only approximates the general cost since there is interaction between provisions; estimates indicate the totals would be somewhat larger. See Leonard E. Burman, Christopher Geissler, and Eric J. Toder, "How Big Are Total Individual Tax Expenditures, and Who Benefits From Them," *American Economic Review, Papers and Proceedings*, vol. 98, no. 2 (May 2008), pp. 79-83.

<sup>&</sup>lt;sup>9</sup> The new rate would be approximately 57% as large as the old rate (1/(1+.74)).

<sup>&</sup>lt;sup>10</sup> Tax Policy Center Table T11-0147, http://taxpolicycenter.org/numbers/displayatab.cfm?DocID=3019&topic2ID=60&topic3ID=61&DocTypeID=.

<sup>&</sup>lt;sup>11</sup> Blueprints for Basic Tax Reform, U.S. Department of the Treasury, Washington, D.C., January 17, 1977; Tax Reform for Fairness, Simplicity and Economic Growth, Value Added Tax, Vol. 3, U.S. Department of the Treasury, November, 1984; and Simple, Fair, and Pro-Growth: Proposals to Fix America's Tax System. The President's Advisory Panel on Federal Tax Reform, Washington, D.C. U.S Government Printing Office, November 2005.

<sup>&</sup>lt;sup>12</sup> Most itemized deductions were retained, including deductions for charitable contributions, mortgage interest and State and local income and property taxes, although the deduction for sales taxes, consumer interest and some miscellaneous provisions were eliminated. Mortgage interest was capped but at a very high level and the floor under medical expense deductions was increased. Major employer-based exclusions from income (such as pensions and exclusions for health insurance) were not addressed. Capital gains were taxed at ordinary rates and individual retirement accounts significantly limited, but these two changes were subsequently reversed in 1997.

Medicare, the earned income credit, and the child credit. Eliminating these provisions would increase the tax burden on low- and moderate-income taxpayers. Furthermore, since many of the recipients of these tax benefits have little or no tax liability, eliminating or reducing these provisions would reduce the progressivity of the income tax system.

The reform of some tax expenditures, representing about 40% of the total revenue loss, faces serious administrative and technical barriers largely because they are in-kind benefits that cannot be easily or fairly valued (e.g., employer-provided health insurance). Furthermore, in the case of the reduced tax rates on capital gains, current scoring practices incorporate such large predicted behavioral responses that very little revenue would be projected to be realized.

Among the remaining provisions, possibilities for revision could be limited. For example, itemized deductions (mortgage interest, state and local taxes, and charitable contributions), accounting for 20% of the total revenue loss of tax expenditures, are broadly used and are highly popular provisions; given public attitudes towards these provisions, eliminating or significantly curtailing them may be difficult. Even narrower provisions may have important constituencies.

The results suggest that most of the revenue that could be gained by eliminating or modifying tax expenditures, as much as 90%, may be difficult to realize. It may prove difficult to gain more than \$100 billion to \$150 billion in additional tax revenues through base broadening. This additional tax revenue, however, is equivalent to about 6% to 9% of projected FY2014 individual income tax, and, consequently, would not allow for significant reductions in tax rates (about a one or two percentage point reduction, thus reducing the top 39.6% tax rate to 37%).

# Tax Expenditures and Base Broadening

Most of the provisions that could be considered for expanding the income tax base are on the tax expenditure list produced by the Joint Committee on Taxation (JCT), which contains over 200 separate tax provisions. Tax expenditures are revenue losses attributable to provisions that provide a special exclusion, exemption, or deduction, or provide for a credit, preferential tax rate, or deferral of tax liability. These provisions are measured with reference to a "normal structure" which contains graduated rates, personal exemptions, and standard deductions. There are provisions that might be considered for base broadening but are not on the list, such as the deduction for moving expenses and for business entertainment. Similarly, while tax expenditures include the exclusion of Social Security, Medicare, and cash public assistance from taxation, they do not include the exclusion of SNAP (formerly food stamps) or Medicaid. Nevertheless, tax expenditures are a fairly good inventory of potential sources of tax base broadening.

The concept of tax expenditures was developed to highlight the point that these provisions should be considered as substitutes for direct spending. Consequently, tax expenditures are generally allocated to the functional budget categories (national defense, international affairs, science and research, and so forth). With this type of organization, a very large fraction of tax expenditures (about 40%) falls into the category of housing and commerce, which accounts for less than 1% of direct spending. This organizational approach, however, can cause portions of a tax provision to appear separately in different functional categories; an example is the deduction for charitable contributions where separate estimates for contributions to health, education, and all other recipients are made.

<sup>&</sup>lt;sup>13</sup> U.S. Congress, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2011-2015*, committee print, 112<sup>th</sup> Cong., 2<sup>nd</sup> sess., January 17, 2012, JCS-1-12 (Washington: GPO, 2012).

When using the tax expenditure list to organize potential base broadening provisions, it is more useful to classify the provisions based on the general kinds of economic behaviors they affect or the general objectives rather than by budget functional categories (see **Appendix A**). For example, do tax expenditures reduce taxes on savings or labor earnings? Or do they affect consumption choices? **Table 1**, therefore, divides tax expenditures into seven major categories: saving, business investment, consumption, owner-occupied housing (which is a combination of an investment choice and a consumption choice), labor supply, government programs (which in many cases would have no behavioral effects but are simply income transfers), and a category termed structural (which provides benefits based on family circumstances rather than affecting behavior). Most of the consumption-related provisions fall into three major categories: health, education, and charity. JCT's revenue loss estimates were made under a current law baseline, which assumes that the Bush tax cuts and the 2009 tax cuts expire as scheduled at the end of 2012.

Table 1.Tax Expenditures by Category of Economic Effect, FY2014

Category	Amount (\$billions)	Share of Total (%)	Share with Provisions Expiring Before FY2014 Included (%)
Saving	347.5	29.1	29.8
Business	23.0	1.9	1.6
Housing: Owner-Occupied	154.3	13.0	12.3
Consumption Allocation	324.1	27.3	25.5
Health	254.8	21.4	18.9
Education	13.4	1.1	1.9
Charity	50.1	4.2	4.2
Labor Supply	82.8	7.0	7.4
Government Programs	237.1	20.0	18.7
Structural	21.1	1.8	4.6

**Source:** CRS calculations based on Joint Committee on Taxation revenue estimates.

**Notes:** The major expiring provisions are the increased child credit (structural), the lower rate for dividends (savings), elements of the earned income credit (labor supply) and education credits and benefits.

For each category, the estimated revenue loss of the provisions in the category is reported in the second column of **Table 1**, followed by the share of the total revenue loss of all tax expenditures. The last column provides an approximate adjustment for provisions that would be reinstated if the Bush tax cuts, plus provisions enacted in 2009, were extended, although it does not account for the change in tax rates. <sup>14</sup> These calculations add back provisions in four areas: the larger and largely refundable child credit (structural), education provisions, earned income credit provisions (labor supply), and lower rates on dividends (saving). <sup>15</sup>

<sup>&</sup>lt;sup>14</sup> Lower tax rates would cause overall tax expenditures to fall.

<sup>&</sup>lt;sup>15</sup> These changes were based on revenue projections by the Joint Committee on Taxation, Estimated Budget Effects Of The "Tax Relief, Unemployment Insurance Reauthorization, And Job Creation Act Of 2010," JCX 54-10, December 10, 2010, http://www.jct.gov/publications.html?func=select&id=48.

Allocating provisions to these seven basic categories is not entirely straightforward. For example, since owner-occupied housing is both an investment and consumption good, owner-occupied housing subsidies increase the return on investment in housing and reduce the cost of the consumption of housing. Many of the provisions relating to saving and consumption are in the form of an exclusion of employer provided benefits (pensions and health insurance) and thus affect labor supply as well as the return to savings or the cost of health spending. The exclusion of health insurance, for example, is classified under health rather than labor supply because the provision primarily changes the amount spent on health. The government programs category essentially involves moving money from one pocket to another since direct spending by the government on benefits could replace tax subsidies, although some programs relate to other categories such as savings (e.g., tax exempt bond interest) and health (e.g., exclusion of Medicare). However, the property tax deduction is included in owner-occupied housing, which is consistent with viewing the owner-occupied housing provisions as relating to investment.

Savings and business provisions that reduce the tax on the return to capital add up to almost a third of the cost of tax expenditures. If owner-occupied housing (which could also be viewed as an investment) is also included, then the share is almost half (44%). Many believe the tax burden on capital income should be lowered or eliminated, which could present a challenge to an income tax reform that eliminates or modifies these provisions.

In contrast, provisions that reduce the tax on labor income, without being tied to specific use of that income, account for a much smaller share of the total, even though overall capital income is about a third the size of labor income. The earned income credit accounts for about two-thirds of the labor supply category.

There are over 200 separate tax expenditures, but the cost is highly concentrated in a relatively small number. **Table 2** shows the 20 largest tax expenditures, the category, and the amount and share of the total. <sup>16</sup> Two expenditures, the exclusion of employee health insurance and the exclusion of pensions contributions and earnings, account for a quarter of the total cost. The top five, adding the mortgage interest deduction, the exclusion of Medicare, and the lower capital gains tax rates, account for close to 50% of the total cost, and the top 10 account for 70%. The top 20 expenditures account for almost 90% of the total cost of all tax expenditures.

Table 2. The 20 Largest Individual Tax Expenditures, FY2014

Provision	Category	Amount (\$billions)	Share of All Tax Expenditures (%)	Cumulative Share (%)
Exclusion of Employer Health Insurance	Consumption	164.2	13.8	13.8
Exclusion of Employer Pensions	Saving	162.7	13.7	27.5
Mortgage Interest Deduction	Housing	99.8	8.4	35.9
Exclusion of Medicare	Government	76.2	6.4	41.9
Capital Gains Rates	Saving	71.4	6.0	48.3
Earned Income Credit	Labor Supply	58.4	4.9	52.8
Deduction of Income Taxes	Government	54.0	4.5	57.7
Gains: Exclusion at Death/Gift Carryover	Saving	51.9	4.4	62.1

<sup>&</sup>lt;sup>16</sup> The revenue loss estimates assume that the tax provisions expiring at the end of 2012 are not extended.

Provision	Category	Amount (\$billions)	Share of All Tax Expenditures (%)	Cumulative Share (%)
Deduction of Charitable Contributions	Consumption	51.6	4.3	66.4
Employer Benefits under Cafeteria Plans	Consumption	43.8	3.7	<b>70.</b> I
Tax Exempt/Tax Credit Bonds	Government	42.7	3.6	73.7
Exclusion of Social Security Benefits	Government	42.6	3.6	77.3
Exclusion of Inside Buildup, Insurance	Saving	27.7	2.3	79.7
Exclusion of Capital Gains on Housing	Housing	27.2	2.3	82.0
Deduction of Property Taxes	Housing	27.1	2.3	84.2
Deduction of Medical Expenditures	Consumption	16.6	1.4	85.7
Individual Retirement Accounts	Saving	16.0	1.3	87.0
Child Credit	Structural	15.1	1.3	88.3
Accelerated Depreciation	Business	10.3	0.9	89.2
Exclusion of Foreign Earned Income	Labor Supply	8.2	0.7	89.8

**Source:** CRS calculations based on Joint Committee on Taxation revenue estimates.

**Table 3** shows the largest 20 tax expenditures after adding back the provisions of the 2001-2003 Bush tax cuts and the 2009 tax cuts that are expiring at the end of 2012. The child credit (which would more than double) moves from the 18<sup>th</sup>-largest expenditure to the 9<sup>th</sup>, with its share rising from 1.2% to 4.4%. The lower rate for dividends is now the 19<sup>th</sup>-largest expenditure and replaces the exclusion for income earned abroad.

Table 3. The 20 Largest Individual Tax Expenditures, FY2014, with Expiring Provisions Extended

Provision	Category	Amount (\$billions)	Share of All Tax Expenditures (%)	Cumulative Share (%)
Exclusion of Employer Health Insurance	Consumption	164.2	13.2	13.2
Exclusion of Employer Pensions	Saving	162.7	13.1	26.3
Mortgage Interest Deduction	Housing	99.8	8.1	34.6
Exclusion of Medicare	Government	76.2	6.1	40.4
Capital Gains Rates	Saving	71.4	5.8	46.3
Earned Income Credit	Labor Supply	58.4	4.7	51.0
Deduction of Income Taxes	Government	54.0	4.3	55.3
Gains: Exclusion at Death/Gift Carryover	Saving	51.9	4.2	59.5
Child Credit	Structural	51.7	4.2	63.6
Deduction of Charitable Contributions	Consumption	51.6	4.2	67.8
Cafeteria Plans	Consumption	43.8	3.5	71.3

Provision	Category	Amount (\$billions)	Share of All Tax Expenditures (%)	Cumulative Share (%)
Tax Exempt/Tax Credit Bonds	Government	42.7	3.5	74.8
Exclusion of Social Security Benefits	Government	42.6	3.5	78.2
Exclusion of Inside Buildup, Insurance	Saving	27.7	2.2	80.2
Exclusion of Capital Gains on Housing	Housing	27.2	2.2	82.2
Deduction of Property Taxes	Housing	27.1	2.2	84.6
Deduction of Medical Expenditures	Consumption	16.6	1.3	86.1
Individual Retirement Accounts	Saving	16.0	1.3	87.4
Lower Rate for Dividends	Savings	14.0	1.1	88.6
Accelerated Depreciation	Business	10.3	0.8	89.4

**Source:** CRS calculations based on Joint Committee on Taxation revenue estimates.

# Allocational and Efficiency Effects

Tax expenditures are sometimes criticized because they are viewed as distorting behavior and leading to economic inefficiency. If the provision, however, addresses a market failure or is otherwise justified by meeting economic policy goals, then that is an argument against reducing or eliminating the provision in income tax reform proposals. Tax expenditures in each of the seven categories are examined in terms of their effects on economic efficiency.

#### Saving

Three of the five large saving tax expenditures are related to retirement savings. First, employer contributions to pensions are excluded from income and the earnings of pension assets are exempt. Employees may also make contributions out of income that has been taxed, and tax deferred savings plans (such as 401(k) plans) allow employee contributions to be deducted. When pensions are received, they are taxed (although a tax free return of non-deductible employee contributions is allowed). Pensions may be (1) defined benefit plans where the employee is provided a pension typically depending on age, years of service, and income, or (2) defined contribution plans such as 401(k) plans where specific amounts are deposited in an account and the employee effectively owns the asset. Self-employed individuals are also eligible for pension benefits. The overall effect of the pension tax treatment when contributions are deductible is equivalent to a tax exemption if tax rates are constant, or a negative (positive) tax rate if tax rates are lower (higher) in retirement than during working years. For IRAs with non-deductible contributions, taxes on investment earnings are deferred until retirement, which basically reduces the effective rate.

A related provision is the individual retirement account, which allows individuals to deduct costs of contributions to their own plans, whether or not their employer provides a pension plan. Individuals may also use IRAs to roll over employer retirement plans if they do not want to take annuities. New contributions to individual retirement accounts are phased out for very high incomes. Two types of plans are available: traditional IRAs and Roth IRAs. Traditional IRAs, which account for almost three-quarters of the cost, are treated the same way as pension plans, with deductions for contributions and taxes on benefits. Roth IRAs are similar to tax exempt

bonds in that the earnings are not taxed, but there is no deduction for the contribution and no tax on benefits. Both result in an effective zero tax. These benefits are not available for high income taxpayers, although they can invest in non-deductible IRAs, where tax is deferred until benefits are received. There is also a small savers' credit, which provides lower-income taxpayers a tax credit of up to \$2,000 for contributions to a retirement plan.

Finally, the inside buildup on life insurance and annuities (the earnings on premiums) is not subject to tax as it is earned and life insurance paid as a death benefit is not be subject to any tax. For annuities, the treatment is similar to non-deductible IRAs or contributions to pensions from after-tax income.

The other two major tax expenditures, under current law, are related to capital gains, which is subject to a lower rate (currently 15%, but scheduled to rise back to 20% after 2012). In addition, for assets held until death, the gain accrued during the decedent's lifetime is not taxed. When assets are transferred by gift, capital gains tax will eventually apply, but not until the asset is sold. The revenue loss estimate captures the effect of the 20% maximum tax rate as contrasted with a 39.6% maximum marginal rate. Dividends are currently also subject to a 15% rate but are scheduled to be taxed as ordinary income after 2012.

If the Bush tax cuts are extended, the capital gains tax rate would remain at 15% and the dividend rate would also remain at 15% (while the top rate would be 35%). Under this circumstance, the tax benefit for dividends would be large enough to be included in the top 20 tax expenditures.

Does exempting or reducing the tax on retirement savings create a distortion, or is it a desirable feature of a tax system that generally applies to income? Is singling out capital gains (and possibly dividends) for preferential treatment desirable?

Some economists argue in favor of a tax system that does not tax the return to investment at all, although most might favor a consumption tax rather than a tax exempting the return to all savings (i.e., a wage tax). If these tax expenditures were eliminated and lower rates substituted, it is likely that the average tax rate for capital would rise. However, it is not clear that the marginal tax rate would rise. Pensions and IRAs would be less desirable because the tax benefits are characterized by ceilings. These ceilings may serve distributional objectives, but the result is that there is no marginal incentive for those at the ceiling.

Even when effects apply at the margin, the effects on savings of tax reductions are not clear. Overall, the evidence suggests that tax reductions do not have much effect on savings and investment whether they are marginal or not. <sup>19</sup> One reason for this effect may be the forces of income and substitution effects: a higher tax rate may make future consumption more costly (the substitution effect discouraging savings) but it also means one must save more to get to a specific target (the income effect encouraging savings). The pattern of savings (falling when equity values are rising, rising in the recent recession when asset values fell) is suggestive of a significant income effect.

<sup>&</sup>lt;sup>17</sup> See CRS Report RL30255, *Individual Retirement Accounts (IRAs): Issues and Proposed Expansion*, by Thomas L. Hungerford and Jane G. Gravelle for additional discussion of IRAs.

<sup>&</sup>lt;sup>18</sup> While both a consumption tax and a wage tax exempt the return to new investment, a consumption tax applies to old capital and allows a deduction for new savings, thereby collecting much more revenue. See Alan J. Auerbach and Laurence J. Kotlikoff, *Dynamic Fiscal Policy* (Cambridge: Cambridge University Press, 1987); and Gilbert E. Metcalf, "Consumption Taxation," in *The Encyclopedia of Taxation and Tax Policy*, ed. Joseph J. Cordes, Robert D. Ebel, and Jane G. Gravelle, 2<sup>nd</sup> ed. (Washington: Urban Institute Press, 2005), pp. 64-67.

<sup>&</sup>lt;sup>19</sup> CRS Report RL33482, Saving Incentives: What May Work, What May Not, by Thomas L. Hungerford

The principal argument made for incentives directed specifically at retirement (even with contributions capped) is that they increase savings because of psychological, "mental accounting," or advertising reasons. Individuals may need the attraction of an up-front tax benefit, the segregation of funds for retirement, and even penalties to prevent raiding their retirement plans. For pension plans and 401(k) plans, there is evidence that default plan features matter (e.g., that if the employer automatically signs up new employees, participation in thrift savings plans increases). Even if these arguments are correct, the large tax benefits may be a costly way of providing incentives; moreover, they tend to benefit high income individuals who may be more likely to have sufficient assets at retirement.

One modification of the defined contribution plans (such as 401(k) plans) that could reduce the revenue loss is to further limit the total dollar contribution. This proposal could increase national saving by increasing public saving without reducing private saving because high-income individuals, who are more likely to save outside these plans, tend to contribute the maximum to their pension by reducing other saving.<sup>21</sup>

A different set of arguments can be made for a reduced capital gains tax rate (where, as will be seen subsequently, one of the most striking effects is a distributional one, with benefits heavily concentrated in higher incomes). An argument may be made for providing tax benefits for capital gains: since gains are taxed only on realization, a lock-in effect causes individuals to delay or avoid realizations as the tax rate rises, and, consequently, little revenue could be gained.<sup>22</sup> The revenue loss is based on a static estimate, which assumes that realizations do not change (i.e., no behavioral effects) when the preferential tax rate is eliminated. But realizations are observed to decline when the tax rate increases. Using past estimates of the behavioral response from the 1980s, only a small portion of the estimated revenue loss reported in **Table 2** (about 7% or \$5 billion) would be gained in the long run by taxing capital gains as ordinary income.<sup>23</sup> If the behavioral response is large, then raising the capital gains tax rate would lead taxpayers to hold suboptimal investment portfolios and would be undesirable from both an efficiency and budgetary perspective.

Subsequent research, however, has estimated that the behavioral responses are much smaller.<sup>24</sup> Assuming a smaller behavioral response suggests that the revenue gain from eliminating the preferential capital gains tax rate could be \$55 billion (77% of the static estimate).<sup>25</sup> But even if

<sup>&</sup>lt;sup>20</sup> CRS Report RL30255, *Individual Retirement Accounts (IRAs): Issues and Proposed Expansion*, by Thomas L. Hungerford and Jane G. Gravelle; and CRS Report RL33482, *Saving Incentives: What May Work, What May Not*, by Thomas L. Hungerford.

<sup>&</sup>lt;sup>21</sup> See Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, March 2011, p. 161. http://www.cbo.gov/ftpdocs/120xx/doc12085/03-10-ReducingTheDeficit.pdf.

<sup>&</sup>lt;sup>22</sup> The lock-in effect imposes efficiency losses because investors may be encouraged to hold suboptimal portfolios or forego investment opportunities with higher pre-tax returns. CRS Report R40411, *The Economic Effects of Capital Gains Taxation*, by Thomas L. Hungerford.

<sup>&</sup>lt;sup>23</sup> This issue is discussed in CRS Report R41364, *Capital Gains Tax Options: Behavioral Responses and Revenues*, by Jane G. Gravelle. The coefficient in the semi-log function used for this estimate is 3.1, the old and new statutory tax rates are 0.2 and 0.396, respectively, and realizations are equal to Ae-bt, where A is a constant, e is the natural constant, b is the coefficient, and t is the tax rate. The effective tax rates are probably lower than the statutory tax rates, especially for the ordinary income tax rate, but the gains would still be small. The tax expenditure is the tax differential times the current realizations, whereas the revenue gain would be revenues at the new higher rate compared to current revenues.

<sup>&</sup>lt;sup>24</sup> See Leonard E. Burman and William C. Randolph, "Measuring Permanent Responses to Capital-Gains Tax Changes in Panel Data," *American Economic Review*, vol. 84, no. 4 (September 1994), pp. 794-809; and CRS Report R40411, *The Economic Effects of Capital Gains Taxation*, by Thomas L. Hungerford.

<sup>&</sup>lt;sup>25</sup> The revenue estimating coefficient of 3.1, which is used by JCT, was derived from time series estimates (change in

the actual realization response is much smaller, the current scoring assumptions of JCT would prevent most of the revenue gain from being counted during congressional debate.<sup>26</sup>

The second capital gains provision, the exclusion of gains at death, occurs because heirs take as the basis (the amount subtracted from the sales price in determining capital gains) the value at the time of death rather than the original purchase price, effectively "resetting" gains to zero. The opportunity to avoid gains by holding assets until death also contributes to the lock-in effect during the lifetime. Treating death as a realization event could require the sale of assets to pay the tax and has never been proposed, although the alternative of retaining the original purchase price as the basis has been (and was in effect for 2010 as an option with a substantial exemption). This approach was abandoned when the Bush tax cuts were extended, and would be administratively problematic if the purchase price is not known.

The realization issue does not arise with beneficial treatment of dividends. Lower rates for dividends, however, share one argument for capital gains: lower rates reduce the double taxation of corporate equity income. From this perspective the treatment of capital gains and dividends might be considered along with corporate tax revisions. If corporate rates are cut substantially below the rates for individuals, the corporate form would become a tax shelter and that sheltering option would be more extensive the lower the tax rates are on capital gains and dividends.<sup>27</sup> It should be noted, however, that in advancing this double taxation argument, only about a third of capital gains arise from corporate stock or capital gains distributions, although another third arises from pass-through entities that could, in part, reflect corporate stock.<sup>28</sup>

A disadvantage of differential rates is that they encourage tax sheltering that converts ordinary income into capital gains. One example of this activity is the carried interest of managers of investment firms, where what may be viewed as compensation is treated as capital gains. A proposal to treat this income as ordinary income led to a projected revenue gain of \$1.7 billion for FY2013.<sup>29</sup> Another example is borrowing (through a business or a home equity loan) and deducting the interest, but purchasing assets whose yield is taxed at the lower capital gains and dividends rate.

aggregate capital gains and aggregate tax rates in the economy as a whole). It was chosen because cross section and panel studies at that time often yielded unreasonable estimates and appeared to be capturing transitory effects. Moreover, a simulation study indicated that with this response it was easy to project realizations in excess of accruals. Using state tax variations yielded more reasonable results, and the estimates were around 1 (the \$55 billion estimate uses 1.1). More recent time series data, as well, led to a smaller coefficient of 1.76 used by the Congressional Budget Office. It would yield a gain of \$37 billion. See CRS Report R41364, *Capital Gains Tax Options: Behavioral Responses and Revenues*, by Jane G. Gravelle.

<sup>&</sup>lt;sup>26</sup> JCT assumes a revenue estimating coefficient of 3.1, which would yield a long-run revenue gain of about \$5 billion instead of \$55 billion. See CRS Report R41364, *Capital Gains Tax Options: Behavioral Responses and Revenues*, by Jane G. Gravelle.

<sup>&</sup>lt;sup>27</sup> Corporate reform options are discussed in CRS Report RL34229, *Corporate Tax Reform: Issues for Congress*, by Jane G. Gravelle and Thomas L. Hungerford; and CRS Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle.

<sup>&</sup>lt;sup>28</sup> http://www.irs.gov/taxstats/indtaxstats/article/0,,id=96649,00.html.

<sup>&</sup>lt;sup>29</sup> Joint Committee on Taxation, Estimated Revenue Effects Of The Revenue Provisions Contained In H.R. 4213, The "American Jobs And Closing Tax Loopholes Act Of 2010," Scheduled For Consideration By The House Of Representatives, JCX-30-10, May 28, 2010, http://www.jct.gov/publications.html?func=startdown&id=3685. For a discussion of carried interest, see CRS Report RS22689, *Taxation of Hedge Fund and Private Equity Managers*, by Mark Jickling and Donald J. Marples; and CRS Report RS22717, *Taxation of Private Equity and Hedge Fund Partnerships: Characterization of Carried Interest*, by Donald J. Marples.

#### **Business**

Only one individual business provision was large enough to rank in the top 20, accelerated depreciation.<sup>30</sup> This type of change would likely need to be coordinated with corporate tax reform, and, as indicated in analyses of corporate reform, there is a tradeoff for accelerated depreciation as an exchange for lowering the rate. Since accelerated depreciation benefits investment and lower rates benefit the capital stock, reducing the corporate tax rate has a larger windfall gain than the windfall loss from reducing depreciation. As a result, the effective tax rate on investment rises. Slowing depreciation also raises more revenue in the short run than in the long run, which should be taken into account if seeking a long-term revenue neutral change.<sup>31</sup>

#### **Owner-Occupied Housing**

All three of the large tax expenditures for owner-occupied housing are in the top 20: the mortgage interest deduction, the property tax deduction, and the exemption from capital gains taxes on the sale of a home. The first two provisions are similar in that they reduce the cost of acquiring and maintaining a home. The exemption from capital gains tax, however, primarily reduces the tax cost of selling a home. The three provisions together sum to \$144.2 billion, about the same size as the top two expenditures, the exclusion for employer insurance and the exclusions for employee pensions. The mortgage interest deduction accounts for 65% of the total for owner-occupied housing incentives, with the capital gains exclusion and the property tax accounting for 17.5% each.

The mortgage interest deduction and deduction of property taxes are not the only provisions that reduce the cost of acquiring and maintaining a home. Owner-occupied housing is also subsidized by the exclusion of net imputed rental income. Imagine two homeowners renting their houses to each other. They would include the rent received in income but deduct the costs, including depreciation, insurance, and maintenance as well as mortgage interest and property taxes. Thus, rather than claiming just deductions for mortgage interest and property taxes they would also increase their respective incomes by the net rental income. Net imputed rental income is the estimated value of the net rental income a homeowner "pays" to himself. Thus disallowing the two deductions would still leave some tax benefit in place. However, taxing imputed rent would present some administrative and valuation problems.<sup>32</sup>

<sup>&</sup>lt;sup>30</sup> Depreciation allows deductions, over time, for the cost of equipment and structures. Ideally, the deduction in each year should equal the decline in value of the assets. The tax expenditure is based on the difference between the tax reduction from the depreciation system and an alternative system. The alternative system allows equal deductions per year. The current depreciation system accelerates those deductions (allows them more quickly) by concentrating more deductions in the earlier years and allowing them over a shorter period of time.

<sup>&</sup>lt;sup>31</sup> CRS Report RL34229, *Corporate Tax Reform: Issues for Congress*, by Jane G. Gravelle and Thomas L. Hungerford; and CRS Report R41743, *International Corporate Tax Rate Comparisons and Policy Implications*, by Jane G. Gravelle. See also Jane G. Gravelle, "Reducing Depreciation Allowances to Finance a Lower Corporate Tax Rate," *National Tax Journal*, Vol. 64, December 2011, pp. 1039-1054 and Jane G. Gravelle, Testimony before The Committee on Finance, United States Senate, March 6, 2012, Tax Reform Options: Incentives for Capital Investment and Manufacturing.

<sup>&</sup>lt;sup>32</sup> The Department of Treasury classifies the exclusion of net imputed rental income as tax expenditure with an estimated FY2014 revenue loss of \$58.7 billion. The Joint Committee on Taxation does not classify the exclusion as a tax expenditure, noting that the "measurement of imputed income for tax purposes presents administrative problems and its exclusion from taxable income may be regarded as an administrative necessity" (U.S. Congress, Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2011-2015*, committee print, 112<sup>th</sup> Cong., 2<sup>nd</sup> sess., January 17, 2012, JCS-1-12 (Washington: GPO, 2012), p. 6.).

The mortgage interest deduction is subject to a limit: interest deductions are limited to those on a mortgage to acquire or improve a home of \$1 million or less, although this high limit affects few taxpayers. The deduction is not limited to original acquisition indebtedness and so can be used to borrow funds with interest deductibility to finance other purchases. This type of borrowing is referred to as home equity loans and homeowners can establish a line of credit for this type of borrowing. It is subject to a separate limit of interest on \$100,000 of principle. The deductions can also apply to a second, or vacation, home. The deduction for interest other than mortgage interest was eliminated in the 1986 tax reform act.

In considering the merits of these tax provisions, three questions are addressed. First, should the government be promoting home ownership? Second, are the tax subsidies effective in achieving that goal? And, third, if homeownership is desirable, are other alternatives to subsidizing it better?

Home ownership is often presumed to be a desirable goal, but subsidies are justified on economic efficiency grounds only if there is too little housing in private markets.<sup>33</sup> Too little housing could arise from positive externalities (benefits to others that are not priced in the market) or some other market imperfection. Two justifications are generally advanced for subsidizing homeownership, relating to external effects and wealth accumulation. The first is that homeowners may make positive contributions to local neighborhoods by being more stable long-term residents, maintaining their homes better, or being more involved citizens.<sup>34</sup> It has been argued that homeownership improves the welfare of children, although some recent research suggests this relationship disappears when controlling for other factors. The second general justification is that homeownership tends to produce an automatic nest egg that can be used for retirement and there is evidence that when housing wealth is included, homeowners accumulate more wealth than renters. If individuals are myopic or for other reasons do not make optimal savings choices, the purchase of a home could lead to an asset that increases in value with each mortgage payment.<sup>35</sup> This effect may be particularly important for moderate income families.

At the same time, home ownership can have negative effects. Homeowners, while producing positive externalities on neighborhoods, may also join in adopting exclusionary policies (such as large lot sizes) to protect their property in a way that damages others (by restricting the supply of housing). Homeowners were more associated with resisting racial integration, for example.<sup>36</sup>

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<sup>&</sup>lt;sup>33</sup> Numerous articles and studies have been written on the positive and negative external effects of owner-occupied housing or other market failures and the potential role played by tax and other subsidies, primarily the mortgage interest deduction. They provide the support for the discussion. See CRS Report R41596, *The Mortgage Interest and Property Tax Deductions: Analysis and Options*, by Mark P. Keightley; Edward Coulson and Herman Li, Measuring the External Benefits of Homeownership, May 2011, http://econ.la.psu.edu/~ecoulson/ownex.pdf; Edward L. Glaeser and Jesse M. Shapiro, "The Benefits of the Home Mortgage Interest Deduction," in *Tax Policy and the Economy*, ed. James Poterba, January 2003, pp. 37-82; Richard Green, "Homeownership, Social Outcomes, Tenure Choice, and U.S. Housing Policy," *Cityscape*, Vol. 5 No. 2, 2001, pp. 21-29; Zhu Xiao Di, Eric Belsky and Xiaodong Liu, "Do Homeowners Achieve More Wealth in the Long Run?" *Journal of Housing Economics*, Vol. 16. 2007, pp. 274-290; Thomas P. Boehm and Alan Schlottmann, "Wealth Accumulation and Homeownership: Evidence for Low Income Households," *Cityscape*, Vol. 10, No. 2, 2008, pp. 225-256; Christian A. Hilber and Tracy M. Turner, *How Sensitive are Homeownership Decisions to Tax Subsidies*, December 2009, http://socrates.berkeley.edu/~raphael/IGERT/ Workshop/turner2010.pdf; Thomas J. Dohmen, "Housing, Mobility, and Unemployment," *Regional Science and urban Economics*, Vol. 35, 2005, pp. 305-325; and N. Edward Coulson and Lynn M. Fisher, *Housing Tenure and Labor Market Impacts: The Search Goes On*, http://buiznt.cob.calpoly.edu/cob/econ/seminars/Coulson.pdf.

<sup>&</sup>lt;sup>34</sup> CRS Report R41596, *The Mortgage Interest and Property Tax Deductions: Analysis and Options*, by Mark P. Keightley.

<sup>35</sup> CRS Report RL33482, Saving Incentives: What May Work, What May Not, by Thomas L. Hungerford.

<sup>&</sup>lt;sup>36</sup> Ingrid Gould Ellen, *Welcome Neighbor? New Evidence on the Possibility of Stable Racial Integration*, The Brookings Institution, Washington, 1997, http://www.brookings.edu/articles/1997/

They may also adopt policies that retard growth and reduce job creation in their areas, making it more difficult for new entrants.<sup>37</sup> Offsetting the wealth accumulation benefit is the problem that investing too much in a home may lead to less portfolio diversification and greater risk, as has been demonstrated during the recent (2007-2009) recession. Finally, homeowners' stability also leads to labor immobility. While this effect is not a market failure as long as it affects only the homeowner's circumstances, the costs can fall on others because of social institutions such as unemployment insurance. More recently, Glaeser has argued that subsidizing homeownership has led to moving away from high density housing, causing overconsumption of housing, reducing the vitality of cities, and causing environmental damage.<sup>38</sup> The magnitude of these effects has been difficult to estimate, but they do lead to some questions about the desirability of providing such large benefits for homeownership.

The mortgage interest and property tax deductions have two potential effects: they may increase the likelihood of homeownership and they may increase the size of homes. It is the tenure choice (rather than the size of homes) that leads to neighborhood externalities. Evidence, however, suggests that tenure choice is not affected very much by the tax benefits. For example, the rate of ownership has not changed although changes in inflation and tax rates have significantly affected the relative cost of owning versus renting. Similarly, home ownership rates are high in many countries without these benefits. Those on the margin between renting and owning are likely to be younger or have lower incomes and thus are less likely to use the tax deductions. Finally, the major barrier to owning a home is the down payment, which is not affected by the subsidy. A recent temporary tax provision, the first-time homebuyer credit, may have been more targeted to the down payment issue, but even it required purchasing the house first and then getting a tax refund.39

The mortgage interest deduction and property tax deduction (as well as the exclusion of imputed net rent) may cause more expenditures on housing for those who choose owner-occupied housing and who benefit from the deductions. Since only about 30% of taxpayers (predominately higherincome taxpayers) itemize deductions while about two-thirds own homes, the deduction tends to benefit wealthier taxpayers.

In general, the often asserted arguments for subsidizing homeownership are subject to uncertainty. Moreover, the subsidies are quite large and do not appear to be well targeted. Eliminating these subsidies could increase tax revenue, as could modification of the deductions. For example, the \$1 million ceiling on eligible mortgages could be lowered, home equity loans could disallowed, and only mortgages on the primary residence could be eligible. CBO estimates that reducing the combined \$1.1 million limit (\$1 million for a mortgage and \$100,000 for home equity loans) to \$500,000 would raise about \$2 billion. 40 Property taxes could be subject to a percentage of income ceiling, or a ceiling might be imposed on all itemized deductions for taxes.

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<sup>&</sup>lt;sup>37</sup> William Rohe, Shannon Van Zandt, and George McCarthy, "Social Benefits and Costs of Homeownership," in Low-Income Homeownership, ed. Nicolas P. Retsinas and Eric S. Belsky (Washington: Brookings Institution Press, 2002), pp. 394-396.

<sup>&</sup>lt;sup>38</sup> See Edward L, Glaeser, "Rethinking the Federal Bias Toward Homeownership," *Cityscape*, Vol. 13, no. 2, 2011, pp. 5-38. Glaeser argues that ownership is more naturally associated with detached dwellings rather than multi-unit dwellings which involve shared ownerships of some portions of the dwelling (such as roof, heating system, landscape) and that subsidizing home ownership indirectly subsidizes larger detached houses.

<sup>&</sup>lt;sup>39</sup> See CRS Report R40153, The First-Time Homebuyer Tax Credit: An Economic Analysis, by Mark P. Keightley.

<sup>&</sup>lt;sup>40</sup> See Congressional Budget Office, Budget Options, Vol. 2, August 2009, http://www.cbo.gov/ftpdocs/102xx/ doc10294/08-06-BudgetOptions.pdf.

CBO, for example, reports estimates prepared by JCT indicating that limiting the deduction for all state and local taxes to 2% of adjusted gross income would raise \$66 billion in FY2014 compared to \$89 billion if the deduction for all taxes were eliminated. Another proposal that would shift the benefit to more moderate income homeowners is to substitute a credit for the itemized deduction, which would make it available to all homeowners. This proposal is often made in the context of a larger reform that would repeal most other itemized deductions or make them subject to credits. As

The potential effect of the housing capital gains exclusion is quite different. As an uncertain tax benefit in the possibly far future, it is less likely to affect tenure and home size choices. However, taxing these gains, as with other capital gains taxes, would cause a lock-in effect, which, in this case, affects not only tax revenues and portfolio diversification, but also affects real choices. It could exacerbate the problem of labor immobility. It can also cause older individuals whose families have become smaller to forego downsizing or switching to rental housing (thus using their housing wealth for living expenses) since, if homes are held until death, there would be no tax. Because gains on homes have largely been protected from tax throughout history, there are little data to provide a guide to the effect of any lock-in on potential revenues from the tax expenditure, although if the effect is as large as that for ordinary gains it could be significant (even at the lower elasticities, taxing capital gains at ordinary rates could collect only 60% of the static revenue gain). Consequently, there appears to potentially be a stronger case for retaining this tax benefit for owner-occupied housing.

#### Consumption

Four of the provisions in **Table 2** largely affect how individuals allocate their earnings; three relate to health and one to charitable contributions.

#### Health

The health market is subject to numerous serious market imperfections, which result in many individuals without health insurance.<sup>44</sup> Those with insurance do not pay the full marginal cost for a specific episode, leading to over consumption. In the health market, sellers tell customers what to buy and pricing is generally not transparent.<sup>45</sup> Containing costs and achieving universal health insurance coverage are two goals that have frequently been pursued by public policy.

<sup>&</sup>lt;sup>41</sup> See Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, March 2011, p. 148. http://www.cbo.gov/ftpdocs/120xx/doc12085/03-10-ReducingTheDeficit.pdf.

<sup>&</sup>lt;sup>42</sup> The Congressional Budget Office discusses a proposal to limit the value of the deductions to 15%. See Congressional Budget Office, ibid., p. 151. Note, however, that there are certain itemized deductions that might need to be retained in deduction form, such as deductions for casualty, theft and gambling losses (important in properly measuring income), and medical expenses.

<sup>&</sup>lt;sup>43</sup> See CRS Report RL32978, *The Exclusion of Capital Gains for Owner-Occupied Housing*, by Jane G. Gravelle and Pamela J. Jackson.

<sup>&</sup>lt;sup>44</sup> Some of this insurance problem arises from a phenomenon known as adverse selection: individuals know more about their health status than insurance companies and insurance is over-priced for the healthy and underpriced for those in poor health. As a result, healthy individuals tend to leave the market, driving the price up. Another problem concerns preexisting conditions so that individuals cannot generally purchase insurance after medical conditions have become apparent. Thus a private market cannot fulfill social insurance objectives.

<sup>&</sup>lt;sup>45</sup> See CRS Report R40834, *The Market Structure of the Health Insurance Industry*, by D. Andrew Austin and Thomas L. Hungerford; CRS Report RL33759, *Health Care and Markets*, by D. Andrew Austin; and CRS Report RL34101, *Does Price Transparency Improve Market Efficiency? Implications of Empirical Evidence in Other Markets for the* 

The single largest health tax expenditure, the exclusion of health benefits provided by employers, which encourages employer health benefits, has mixed effects. For those eligible, it encourages the excessive purchase of health insurance and thus leads to more over-consumption and rising costs of health care. Moreover, while socially optimal insurance would feature limited coverage for ordinary expenses and more complete coverage for catastrophic expenses, employer plans typically do not have a high deductible, a situation often thought to be due to the tax subsidy. <sup>46</sup> At the same time, it has played an important role in dealing with market failures that cause inadequate insurance coverage among the non-elderly population (the elderly population is covered by mandatory government programs). Therefore, there are justifications for the subsidy, which should be weighed against the incentives to increase spending on health care.

The health legislation passed in 2010 (the Patient Protection and Affordable Care Act, P.L. 111-148, and the Health Care and Education Reconciliation Act of 2010, P.L. 111-152) would mandate health insurance and constrain the range of premiums charged, as well as provide subsidies for lower-income families not covered by Medicaid, the health coverage program for those in poverty.<sup>47</sup> The justification for encouraging employer health insurance would no longer apply with such a universal coverage system in place and, on efficiency grounds, the case for taxing these benefits would be clear. But as discussed below, there are significant technical challenges to taxing employer health insurance, which, even if eliminating this benefit were desirable on efficiency grounds, might preclude this provision from being eliminated so as to raise tax revenues.

The health legislation adopted in 2010 also limited tax benefits for high cost "Cadillac" health plans by placing an excise tax on high cost employer-sponsored health plans. But it did not impute income to the employees for these plans; rather, it levied a tax on insurance companies based on the cost above a ceiling. A possible policy option would be to further lower that ceiling.

A related provision, the exclusion of benefits provided under cafeteria plans, would be much easier to eliminate. <sup>48</sup> A cafeteria plan allows employees to choose a selection of benefits, but the major use is to cover health insurance premiums paid by employees (hence its inclusion under health).

The other major health related tax expenditure, the deduction for health expenses, is different. It is an itemized deduction for to out-of-pocket health expenditures in excess of a percentage of adjusted gross income. Currently, the deduction is for expenses exceeding 7.5% of income, but that amount will increase to 10% in 2013. The rationale for this deduction is largely that these expenses are involuntary ones that reduce the taxpayer's ability to pay taxes. It may be difficult to imagine not allowing some allowance for catastrophic medical expenditures, so the principal issue could be where to set the floor. The 10% floor is high by historical standards (prior to 1986 the floor was either 3% or 5%). It is not clear whether the floor could be increased further while still achieving the ability-to-pay objective.

Health Sector, by D. Andrew Austin and Jane G. Gravelle.

<sup>&</sup>lt;sup>46</sup> Socially optimal insurance would cover the care of an individual up to the point where the marginal benefit equals the marginal cost. See Jonathan Gruber, "The Tax Exclusion for Employer Sponsored Health Insurance," *National Tax Journal*, Vol. 64, June 2011, Part 2, 511-530.

 $<sup>^{47}</sup>$  See CRS Report R41331, *Individual Mandate and Related Information Requirements under ACA*, by Janemarie Mulvey and Hinda Chaikind.

<sup>&</sup>lt;sup>48</sup> Cafeteria plans are an employer benefit that allows employees to choose benefits among various options that include cash (which is taxable), taxable benefits such as vacation time, and nontaxable benefits such as health care.

#### **Charitable Contributions**

A deduction for charitable contributions is an itemized deduction. They are subject to market failures because of "free-rider" problems: to the extent the contribution increases overall social welfare, individual taxpayers can benefit from the contributions of others, giving them an incentive to not contribute; consequently, overall giving is undersupplied. For example, transfers to relieve poverty can provide a social benefit to donors and to nondonors who are not recipients if there is a social value, such as reducing crime.

Two issues, however, make the deduction potentially questionable from an economic perspective. The first is that the individual contributor may be induced to give less to charity than the revenue loss, so that the government could provide more funds for charitable purposes through grants. This effect occurs when the elasticity of charitable giving (percentage change in charity contributions from a 1% change in tax rates) is less than one, which most current research shows. The second is that the contributors may receive direct benefits, implicit benefits, or their contributions may go to charities that much of the population does not benefit from (e.g., contributors may receive front-row seats at the orchestra or box seats at sporting events, or may give to Ivy-league schools and art museums that much of the population may not consume). Very little of charitable giving (less than 8%) goes directly to aid those in poverty.<sup>49</sup>

One option for charitable contributions is to provide a floor, so that only large contributions relative to income are eligible, an approach that increases the induced giving per dollar of revenue loss. It would also increase tax compliance since small donations would no longer be eligible. A 2% of income floor is projected to raise \$18.7 billion for FY2013. <sup>50</sup> According to the latest data available, about 14% of contributions would no longer have a marginal incentive with a 2% floor, although the revenue gain would be 37% of the total tax expenditure. <sup>51</sup> The relatively larger gain in revenue compared to the reduction in incentive is because most of the contributions are made by taxpayers who would retain a marginal incentive after disallowing contributions up to 2% of income.

Another option, or perhaps an additional one, is to revise the treatment of appreciated property. Taxpayers who donate appreciated property can take a deduction for the full value of the property, without paying capital gains tax on the increase in value. About a quarter of donations are non-cash, although about 30% are for clothes, autos, and household items that depreciate. Donations of appreciated property (such as stock, real estate, and art) are heavily concentrated in high income groups. Revisions could allow deductions only for the minimum of the fair market value or the basis (which would encourage people to sell the asset), or require tax on the gain.<sup>52</sup>

<sup>&</sup>lt;sup>49</sup> Counting indirect and in-kind estimates this number may rise to between 25% to 30%, depending on a range of estimates for religious giving. These numbers encompass items other than direct needs such as scholarships for higher education. See Patterns of Household Charitable Giving by Income Group, 2005, prepared for Google by the Center on Philanthropy at Indiana University, Summer 2007 http://www.philanthropy.iupui.edu/Research/Giving%20focused%20on%20meeting%20needs%20of%20the%20poor%20July%202007.pdf. For further discussion of charitable contributions issues see CRS Report RL34608, *Tax Issues Relating to Charitable Contributions and Organizations*, by Jane G. Gravelle and Molly F. Sherlock and CRS Report R40518, *Charitable Contributions: The Itemized Deduction Cap and Other FY2011 Budget Options*, by Jane G. Gravelle and Donald J. Marples . The second report contains a review of evidence on the elasticity of charitable giving.

<sup>&</sup>lt;sup>50</sup> See Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, March 2011, p. 150. http://www.cbo.gov/ftpdocs/120xx/doc12085/03-10-ReducingTheDeficit.pdf.

<sup>&</sup>lt;sup>51</sup> Based on the 2006 Statistics of Income public use file. In that year there were \$175.7 billion in contributions, with \$22.3 billion for taxpayers below the floor and \$2.3 billion for taxpayers who switch to the standard deduction.

<sup>&</sup>lt;sup>52</sup> For data on non-cash gifts, see Deena Ackerman and Gerald Auten, "Tax Expenditures for Noncash Charitable Contributions," *National Tax Journal*, vol. 64, no. 2, Part 2 (June 2011), pp.651-688.

#### **Labor Supply**

Two provisions relating to labor supply are in the provisions in **Table 2**: the earned income tax credit and the exclusion of fringe benefits. These provisions are tax incentives designed to encourage work effort.

The earned income credit is a major subsidy for low-income individuals, especially for families with children, and has helped to offset the stagnation of wages and the burden of the payroll tax at the lower end of the income spectrum. Unlike other transfer programs aimed at lower-income individuals, it is related to earnings. In theory, it should increase labor force participation by single parents, but could reduce hours by those in the work force and second earners because benefits are phased out and create implicit taxes as earnings rise. Most research suggests that it encourages labor force participation of single mothers, but has little effect on hours worked. Its most important justification, however, is distributional, rather than relating to economic efficiency.<sup>53</sup>

The other provision is one that excludes a certain amount of income earned abroad from U.S. tax. Since these individuals are protected from double taxation by a foreign tax credit, this provision subsidizes the location of employees in low tax jurisdictions abroad, for which there appears to be no clear economic rationale.

#### Government

Four of the tax expenditures in **Table 2** are tax benefits related to government programs—either exemptions from taxes on government provided benefits, or benefits granted to states and localities. These provisions basically subsidize government programs and there are questions as to whether the goals can best be met through tax provisions or direct spending.<sup>54</sup> In this area, the question is not so much the effect of the tax provision on private behavior (investment and savings, private consumption choices, and labor supply) but on whether they are desirable as part of government programs of transfers to individuals or to state and local governments.

#### **Exemption of Medicare and Social Security Benefits**

Two of the tax expenditures involve the exemption of Medicare benefits and part of Social Security benefits from income taxation.<sup>55</sup> The reduction of the federal deficit due to taxing these benefits could also be achieved by directly reducing the benefits by an equivalent amount. Alternatively, revenues from taxing Social Security and Medicare benefits could be used to maintain or increase benefit levels (this was the justification for taxing part of Social Security benefits beginning in 1984).

The recipients affected by taxing Medicare benefits would be largely moderate income taxpayers, since the Medicare benefit is not tied to income (see below). Although some Social Security benefits are subject to taxation, low and moderate income taxpayers would bear most of the increased burden of taxing all Social Security benefits (see below).

<sup>&</sup>lt;sup>53</sup> See Nada Eissa and Hilary Hoynes, "Redistribution and Tax Expenditures: The Earned Income Tax Credit," *National Tax Journal*, Vol. 64, No. 2, Part 2, June 2011 pp. 689-730.

<sup>&</sup>lt;sup>54</sup> CRS Report RL33641, *Tax Expenditures: Trends and Critiques*, by Thomas L. Hungerford.

<sup>&</sup>lt;sup>55</sup> Up to 85% of Social Security benefits are taxable; the percentage that is taxable depends on the amount of other income received by the taxpayer. See CRS Report RL32552, *Social Security: Calculation and History of Taxing Benefits*, by Christine Scott.

The fundamental issues with these tax changes are whether these programs should be cut back, how the costs and benefits should be distributed, and, in the case of Medicare, whether taxation is administratively feasible. These same issues apply to taxation of other federal government benefits, such as the exclusion of certain allowances for military employees and civilian employees working abroad, and the exclusion of veteran's benefits.

# Subsidies for State and Local Governments: Deductions for Income Taxes and Exclusion of Tax Exempt Bonds

The other two tax expenditures related to government programs in **Table 2** are those that support state and local governments: the deduction of state and local income taxes, which makes these taxes effectively smaller for itemizers, and the exclusion of interest on tax exempt bonds.<sup>56</sup> (Note that the property tax deduction was included in housing.)

With any subsidy to state and local governments, whether via a tax subsidy or via direct grants, one question is whether or not the nation's taxpayers in general should subsidize activities in specific states or localities. Some government services provided by state and local governments do potentially benefit all federal taxpayers to some degree (such as roads) while others do not (such as residential garbage pick-up). Given the mobility of the population, there are general benefits to education (which is a recipient of some of the tax benefits of general obligation tax exempt bonds); similarly, taxpayers may benefit from the awareness that the poor are being cared for. But overall the spending of state and local governments tends to largely benefit their own residents.

Furthermore, tax exempt bonds and income tax deductions are blunt instruments to provide subsidies. Income taxes tend to be the highest for wealthy states that may need aid the least, and a few states do not have income taxes. Tax exempt bonds are targeted at providing physical assets (such as buildings). It is unlikely that a system of grants that replaced these benefits would be targeted in this particular way. For these reasons both have been the targets of reform in the past.

For income tax deductions, an alternative to eliminating the deduction is to cap it, perhaps as a percentage of income (this change would apply to all taxes, not just income taxes). CBO, for example, reports estimates prepared by JCT indicating that limiting the deduction for all state and local taxes to 2% of adjusted gross income would raise \$66 billion in FY2014 compared to \$89 billion if the deduction were eliminated altogether.<sup>57</sup>

For tax exempt bonds, two issues arise.<sup>58</sup> The first issue is that an exemption of interest is more costly than a direct subsidy to the states since taxpayers at the highest marginal tax rate get a windfall. Individuals invest in tax exempt bonds with lower yields because of the tax benefit (and paying the lower yield is how the state and local governments benefit). For example, if the yield on a taxable bond is 8% and the yield on a tax exempt bond with the same risk is 6%, a taxpayer in the 25% marginal tax bracket will be indifferent between the two (since the after-tax return is the same), but a taxpayer in the 35% tax bracket will receive a higher after-tax return from the tax exempt bond. If the federal government paid the subsidy directly to the state, this extra return would be eliminated since state and local bonds would bear the same yield as taxable bonds. An

<sup>&</sup>lt;sup>56</sup> See CRS Report RL32781, *Federal Deductibility of State and Local Taxes*, by Steven Maguire; CRS Report R41735, *State and Local Government Debt: An Analysis*, by Steven Maguire; and CRS Report R40523, *Tax Credit Bonds: Overview and Analysis*, by Steven Maguire.

<sup>&</sup>lt;sup>57</sup> See Congressional Budget Office, *Reducing the Deficit: Spending and Revenue Options*, March 2011, p. 148. http://www.cbo.gov/ftpdocs/120xx/doc12085/03-10-ReducingTheDeficit.pdf.

<sup>&</sup>lt;sup>58</sup> For a discussion of tax exempt bonds, see CRS Report R42396, *The Impact of Budget Proposals on Tax-Exempt Bonds*, by Steven Maguire.

initiative has already begun in this area with Build America Bonds, although its effects are limited (\$2.3 billion of the total cost). Any change in tax exempt bonds would presumably apply only to new issues of bonds and a shift to direct subsidies would not raise much revenue in the short run. The CBO budget options study reports JCT estimates indicating a gain of about \$3 billion in FY2013, but rising to \$29 billion by FY2021.

The second issue is that about a fifth of the cost of the exemption is not for general obligation bonds (bonds used to finance government investments such as schools) but for private activity bonds.<sup>59</sup> These funds are borrowed by businesses, and often allow interest to be excluded for private borrowing. These bonds, however, are capped in some cases and limited to certain specific uses (sewer facilities, docks, transit); the purpose with the largest revenue cost is hospitals (\$2.5 billion).

Any modification of tax exempt interest would likely need to be coordinated with corporate tax reform since corporations also purchase these bonds and, at least currently, are taxed at the top individual rate.

#### Structural

This category is composed of provisions that don't provide incentives or affect behavior, but appear to be associated with distributional or equity issues. The only one appearing in **Table 2** is the child credit, which would be larger if the current higher credit under the Bush tax cuts and the 2009 stimulus are made permanent or extended past 2012 (see **Table 3**).<sup>60</sup>

#### Other Notable Tax Expenditures

By concentrating the discussion on the largest 20 tax expenditures, the analysis has not dealt with smaller provisions that could be modified or eliminated and together could raise a considerable amount of tax revenue. **Table 4** lists all of the remaining provisions (24) that have revenue effects of at least \$1 billion. In sum, they account for \$100 billion or 8% of total tax expenditures. Compared to category distribution in **Table 1**, these smaller tax expenditures include no provisions for owner-occupied housing, and only two provisions are related to savings. The largest category is consumption with health and education accounting for a significant fraction.

Table 4.Additional Tax Expenditures Not Among the Top 20, With a Cost of \$1 Billion or More, FY2014

Provision	Category	Amount (\$billions)
Exclusion of Allowances, Military and Foreign Service	Government	7.9
Exclusion of Veteran's Benefits	Government	7.2
Miscellaneous Employee Fringe Benefits	Labor Supply	7.0
Small Business Employee Health Insurance Credit	Consumption	6.0
Self Employed Health Insurance Deduction	Consumption	5.9
Employer Provided Non-Health Insurance	Consumption	5.7

<sup>&</sup>lt;sup>59</sup> CRS Report RL31457, *Private Activity Bonds: An Introduction*, by Steven Maguire.

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<sup>&</sup>lt;sup>60</sup> For a description of the child credit, see CRS Report R41935, *The Child Tax Credit: Economic Analysis and Policy Options*, by Margot L. Crandall-Hollick.

Provision	Category	Amount (\$billions)
Employer Provided Transportation Benefits	Labor Supply	5.7
Tuition Tax Credits	Consumption	5.5
Exclusions of Workers Compensation (Health)	Consumption	5.4
Production Activities Deduction	Business	5.3
Exclusion of Workers Compensation	Government	5.2
Exclusion of Cash Public Assistance	Government	5.0
Exclusion of Health Insurance Military	Consumption	5.0
Additional Standard Deduction, Blind and Elderly	Structural	4.4
Exclusion of Earnings of Voluntary Employees Beneficiary Associations	Labor Supply	4.2
Exclusion of Scholarships and Fellowships	Consumption	2.7
Deferral of Gain, Non-Dealer Installment Sales	Savings	2.7
Child Care Credit, Employer Care	Labor Supply	2.6
Personal Exemption for Students	Consumption	2.4
Health Savings Accounts	Consumption	2.1
Exclusion of Damages for Injury or Sickness	Structural	1.6
Deferral of Interest on Savings Bonds	Government	1.5
Non-Recognition of Gain on Like Kind Exchanges	Saving	1.3
Exclusion of Employee Meals and Lodging	Labor Supply	1.3
Exclusion of Employee Education Assistance	Consumption	1.0

Source: CRS calculations based on Joint Committee on Taxation revenue estimates.

Most of the health provisions are extensions of employer health exclusions that are listed separately (for military personnel and retirees, workers compensation, and provisions for the self-employed) and an alternative employer plan (health savings accounts). The analysis would be similar to those for exclusions of employer provided health insurance in general.

There were no education subsidies in the top 20 and although these provisions are broadly available, they have a relatively small revenue loss. <sup>61</sup> The largest of these is the tuition tax credit (enacted in 1997), which has been criticized as adding complexity to the tax code when an apparatus for federal student aid already existed. <sup>62</sup>

The second-largest category of tax expenditures listed in **Table 4** is government programs. These include the exclusion of various military allowances and combat pay for the military as well as certain allowances for foreign service personnel and exemptions for other federal programs. The same issues arise with them as with other government programs tax provisions.

Several labor supply provisions are included; most of them relating to the exclusion of various employee fringe benefits (although some of the transportation subsidies are aimed at encouraging mass transit or carpooling). The largest is the exclusion of miscellaneous employee fringe benefits such employee discounts, parking, gyms, and similar provisions. If these were considered

<sup>&</sup>lt;sup>61</sup> CRS Report RL32507, Higher Education Tax Credits: An Economic Analysis, by Mark P. Keightley.

<sup>62</sup> Ibid.

as a group, exclusion of employee benefits would total \$18.2 billion and rank 16<sup>th</sup> on the major tax expenditures list in **Table 2**. The exclusion of miscellaneous benefits favors industries where these benefits are more prevalent (for example, employee discounts may benefit retail sales in consumer goods). Transportation benefits are, however, aimed at subsidizing mass transit to some degree. Taxing some or all of these benefits could create administrative problems (see below).

A provision relating to businesses is the production activities deduction. Although this provision is available for corporations, it would be possible to eliminate it independently. This provision was introduced in 2004 and was originally aimed at corporate manufacturing, to encourage operations in the United States, but was later expanded to other industries and unincorporated businesses. Many of these businesses, particularly unincorporated businesses, are unlikely to produce abroad, so that this justification does not apply.<sup>63</sup>

#### **Distributional Issues**

Tax expenditures have often been described as having an "upside-down" subsidy feature—that is, higher-income taxpayers benefit to a greater extent than lower-income taxpayers from tax expenditures because of the progressive nature of the income tax system. <sup>64</sup> The upside-down subsidy is because a taxpayer in the 35% tax bracket receives a 35 cent tax reduction if their taxable income is reduced by \$1 while a taxpayer in the 15% tax bracket receives only 15 cent tax reduction. Not all tax expenditures, however, benefit high-income taxpayers; some are explicitly or implicitly targeted to lower-income taxpayers. <sup>65</sup> Since tax expenditures can affect taxpayers in one part of the income distribution or another, tax expenditures can change the distribution of after-tax income. <sup>66</sup>

The Suits progressivity index is employed to summarize the progressivity or regressivity of tax expenditures. The Suits index ranges from -1 to +1.67 The Suits index is negative if the benefits from a tax provision are received primarily by taxpayers in the upper part of the income distribution and is said to be regressive. It is positive if the benefits are received primarily by lower-income taxpayers and is said to be progressive. The tax benefits are proportionately distributed if the Suits index is zero.

The distributional consequences of tax expenditures can depend on features of the tax code that are unrelated to the specific provision, such as the tax brackets and tax rates.<sup>68</sup> Furthermore, the nature of the tax expenditure affects the distribution of tax benefits. For example, a provision that reduces taxable income may have a different effect than one that reduces tax liability directly.

<sup>&</sup>lt;sup>63</sup> CRS Report R41988, *The Section 199 Production Activities Deduction: Background and Analysis*, by Molly F. Sherlock.

<sup>&</sup>lt;sup>64</sup> Stanley S. Surrey, "Tax Incentives as a Device for Implementing Government Policy: A Comparison With Direct Government Expenditures," *Harvard Law Review*, vol. 83, no. 4 (February 1970), pp. 705-738.

<sup>&</sup>lt;sup>65</sup> See CRS Report RL33641, *Tax Expenditures: Trends and Critiques*, by Thomas L. Hungerford; and Thomas L. Hungerford, "Tax Expenditures: Good, Bad, or Ugly?" Tax Notes, vol. 113, no. 4 (October 23, 2006), pp. 325-324.

<sup>&</sup>lt;sup>66</sup> Thomas L. Hungerford, "The Redistributive Effect of Selected Federal Transfer and Tax Provisions," *Public Finance Review*, vol. 38, no. 4 (July 2010), pp. 450-472.

<sup>&</sup>lt;sup>67</sup> See Daniel B. Suits, "Measurement of Tax Progressivity," *American Economic Review*, vol. 67, no. 4 (September 1977), pp. 747-752. See **Appendix B** for a more detailed explanation of the Suits index and the data used to estimate the Suits index for the selected tax provisions.

<sup>&</sup>lt;sup>68</sup> See CRS Report RL34622, Tax Expenditures and the Federal Budget, by Thomas L. Hungerford.

**Table 5** reports the Suits index for 14 of the 20 largest individual tax expenditures; the Suits index for the other 6 could not be estimated because data are not available.

#### Saving

The tax expenditures in the saving category are all regressive (though to different extents) since the Suits index is negative—higher-income taxpayers receive a disproportionate share of the tax benefits relative to their income. There are two primary reasons for this pattern. First, higher-income taxpayers are more likely to save and invest in assets than lower-income taxpayers.<sup>69</sup> Second, the tax schedule is progressive, so taxpayers in higher tax brackets receive greater tax benefits from reducing taxable income. For example, if taxpayers in the 35% tax bracket contribute an additional dollar to their 401(k) plan, they reduce their tax liability by 35 cents. Conversely, taxpayers in the 15% tax bracket reduce their tax liability by 15 cents if they contribute an additional dollar to their 401(k) plan. The tax benefits of pension and IRA saving are less regressive than the other saving tax expenditures because there is an upper limit on annual contributions and most lower-income taxpayers who do save do so in their 401(k)s and IRAs.

#### Housing

The two housing provisions are deductions that are only available to taxpayers who itemize deductions (about one-third of all taxpayers). The Suits index for the deduction for property taxes and mortgage interest is closer to zero than to -1, suggesting the tax benefits are moderately regressive. Taxpayers who itemize deductions tend to be spread throughout the income distribution: almost one-third have income below \$50,000 and another third have income over \$100,000.70 However, over half of the total amount deducted is claimed by taxpayers with income over \$100,000 because (1) higher-income taxpayers tend to own more expensive homes with larger mortgages and higher property taxes, and (2) the progressivity of the tax schedule leads to the "upside-down" subsidy effect.

Table 5. Progressivity of Selected Tax Provisions: The Suits Index

Provision	Туре	Suits Index
Saving		
Capital Gains	Preferential Tax Rate	-0.705
Qualified Dividends	Preferential Tax Rate	-0.535
Employer Pensions & IRAs	Deferral of Tax Liability	-0.165
Housing		
Property Taxes	Deduction	-0.151
Mortgage Interest	Deduction	-0.115
Consumption		
Charitable Contributions	Deduction	-0.352

<sup>&</sup>lt;sup>69</sup> For example, John Sabelhaus and Jeffrey A. Groen, "Can Permanent-Income Theory Explain Cross-sectional Consumption Patterns?" *Review of Economics and Statistics*, vol. 82, no. 3 (August 2000), pp. 431-438 show that consumption to income ratios decline as income rises.

<sup>&</sup>lt;sup>70</sup> CRS analysis of the 2006 IRS SOI Public Use File.

Provision	Туре	Suits Index
Medical Expenses	Deduction	0.183
Employer Health Insurance	Exclusion	0.282
Labor Supply		
EITC	Tax Credit	0.937
Government		
Tax-exempt Interest	Exclusion	-0.559
State & Local Income Taxes	Deduction	-0.405
Medicare	Exclusion	0.478
Social Security	Exclusion	0.499
Structural		
Child Tax Credit	Tax Credit	0.536

Source: CRS analysis of the 2006 IRS SOI Public Use File and 2007 Survey of Consumer Finances.

#### Consumption

The tax provisions in the consumption category show no consistent pattern in the Suits index. The tax benefit of the charitable contribution deduction is regressive (Suits index of -0.352) for the same reasons as the mortgage interest deduction—only itemizers can claim the deduction and the progressivity of the tax schedule.

The tax benefit of the deduction for medical expenses, which an itemized deduction available to only itemizers, is moderately progressive with a Suits index of +0.183. The reason that the benefit of the medical expenses deduction is progressive is the income floor—in 2010, medical expenses above 7.5% of adjusted gross income could be deducted. Lower-income households tend to have higher medical expenses relative to their income than higher-income households. In 2010, health care expenditures of the poorest 20% of households were equivalent to 15.4% of their income compared to 3.1% of income for the richest 20% of households.

The tax benefit of the exclusion of employer-provided health insurance is progressively distributed with a Suits index of +0.282. The exclusion is not limited to just taxpayers who itemize, so the tax benefit is more widely distributed throughout the income distribution. Furthermore, the amount excluded often is independent of income.

### Labor Supply

The sole labor supply provision is the earned income tax credit (EITC) with progressively distributed tax benefits. The Suits index is close to +1.0. The EITC is available to all taxpayers who qualify as opposed to just taxpayers who itemize. Furthermore, it does not depend on the taxpayer's tax bracket—it is directly subtracted from tax liability. Furthermore, it is a refundable tax credit and, thus, taxpayers with no tax liability can receive a refund. The EITC is available to

<sup>&</sup>lt;sup>71</sup> CRS calculations based on Bureau of Labor Statistics tabulations from the Consumer Expenditure Survey (http://www.bls.gov/cex).

<sup>&</sup>lt;sup>72</sup> For a description, see CRS Report RL31768, *The Earned Income Tax Credit (EITC): An Overview*, by Christine Scott.

taxpayers with adjusted gross income below a certain level (\$48,362 for a married taxpayer filing a joint return), who have earnings and limited investment income.

#### Government

The government tax expenditures, which basically subsidize government programs, can be either progressive or regressive. The exclusion of tax-exempt interest and the deduction of state and local income taxes are subsidies to state and local governments. The tax benefits of these two tax expenditures are regressively distributed with Suits indices of -0.559 and -0.405, respectively. Tax-exempt interest is primarily received by higher-income taxpayers and the tax benefits depend on the taxpayer's tax bracket—the progressive tax system leads to the regressive or "upsidedown" tax benefits. The tax benefits of the deduction of state and local income taxes are regressively distributed because (1) the deduction is limited to itemizers, (2) the benefits depend on the taxpayer's tax bracket, and (3) higher-income taxpayers pay higher state and local income taxes than lower-income taxpayers (i.e., the deduction is larger).

The tax benefits of the exclusions of Medicare and Social Security benefits are progressively distributed. Although the tax benefits depend on the taxpayer's tax bracket, which tends to reduce progressivity, these benefits are received by elderly taxpayers who tend to have lower income than nonelderly working taxpayers. Furthermore, the proportion of the Social Security benefit that is excluded depends on the taxpayer's income—lower-income taxpayers have a larger share of their Social Security benefit excluded from taxation.

#### Structural

The last category is structural tax provisions; the only tax provision listed is the child tax credit. The child tax credit does not depend on the taxpayer's tax bracket and is not limited to itemizers. The tax credit is limited to taxpayers with income below a certain level (the credit begins to phase-out for married taxpayers with AGI over \$110,000) and who have qualifying children. Consequently, the tax benefit is progressively distributed with a Suits index of +0.536.

# **Administrative and Technical Challenges**

Several tax provisions would be easy to change, which could simplify tax administration and compliance. These provisions include, in general, deductions, credits, and differential rates that already appear on the tax form. Scaling back deductions (such as by imposing floors) would require some minor additional computations but present no significant difficulties.

Including certain types of income that do not appear on the tax return (such as certain exclusions) can present significant technical challenges that could preclude them from consideration in tax reform proposals. These serious technical problems arise from two separate, but related, issues: the difficulty of determining the dollar value of certain types of income, and the imposition of taxes without the actual realization of income. In some cases, there may be potential solutions, but in others, it may be difficult to imagine how the provision might reasonably be enforced.

These technical challenges apply to five of the provisions in **Table 2**, including the largest two, and account for almost 40% of total tax expenditures: the exclusion of employer health insurance, the exclusion of employer pensions, the exclusion of Medicare benefits, the taxation of capital gains at death, and the taxation of the inside buildup of annuities. These challenges also apply about a third of the smaller provisions in **Table 4** (accounting for 1% to 2% of total tax

expenditures). It likely would be difficult to reduce or eliminate these tax expenditures because it would be difficult to administer the tax fairly.

#### **Health Benefits**

The principal problem with employer health insurance is determining the value of the insurance to each taxpayer. When compared to what might be paid in the private market, the value depends on age, existing health conditions, family size and composition, and cost of medical care in the particular area. Not only would it be extremely difficult to assign a value, but assigning costs based on existing health conditions would re-introduce adverse selection issues into the market as well as result in very large imputed income for those with serious health problems.

An alternative, which was discussed during the 2010 health care debate, would be to allow a fixed dollar amount per employee, or an amount differentiated by limited characteristics (i.e., family size and age). But this approach does not eliminate the problem; not only would some employees then include in income amounts that are in some cases larger than their actual benefits, inequities between otherwise identical individuals receiving identical benefits could occur because of firm characteristics. For example, if existing health conditions are not used to differentiate imputations and some sort of average amount were assigned, then those individuals working in firms, especially smaller firms, where employees have worse health on average will be assigned more income than those in other firms. These problems would also occur if age were disregarded.

Another alternative would be to disallow the deduction by the firm but that approach would lead to other problems (nonprofit and some other firms do not pay taxes, tax rates for employees would differ from tax rates for firms). The approach taken in the Patient Protection and Affordable Care Act (P.L. 111-148) was to impose a flat rate tax that the insurer pays, but that too would face the same problems of a mismatch with employee tax rates.

Modifying the fourth-largest tax expenditure, the exclusion of Medicare, confronts the same problem as the employer exclusion for health care—it would be very difficult to impute the insurance value of the benefit. Moreover, while the value may vary among taxpayers, the coverage is the same for all individuals regardless of their earnings or the number of years they were paying taxes (as long as they were vested). Thus not only does the value of the insurance vary with taxpayer characteristics, the amount that should be included in income varies since the employee's portion of the tax that financed Medicare was not originally deductible. That contribution would need to be recovered tax free, to properly reflect income, and would vary across taxpayers depending on how long they had been in the system. Social Security benefits are currently taxed based on a rule of thumb because they are tied, albeit imperfectly, to past earnings.

#### **Pension Benefits**

The modification of the second-largest tax expenditure, tax exclusions for employer retirement plans, confronts certain challenges because of the structure of defined benefit pension plans. With a defined benefit plan, it is very difficult to determine the annual gain in value of retirement benefits in any given year because it varies depending on employee circumstances including future behavior, since retirement benefits plans are generally based on income, age, and years of service to the firm. Furthermore, an employee is not immediately vested, and if he leaves the firm before the vesting period is completed (typically five years) there will be no benefit. Changing the tax treatment of defined contribution plans (e.g., 401(k) plans) would be more straightforward but would create a disparity in the tax treatment of the two types of pension plans.

#### Saving

The exclusion from income for gains at death (the eighth-largest tax expenditure) could be difficult to modify because of the uncertainty about the value of the assets (the original cost or basis may be difficult to determine on long held assets) and the question of whether or not the estate has the funds to pay the tax. Currently, the capital gains tax is based on the price at which the asset is sold above the market value at the time of death (rather than the price the decedent paid).<sup>73</sup> Moreover, no subsequent gain is taxed until the asset is sold. In this system, the heir has the direct information to calculate his gain which is the excess of sales price over the market value at the time of death. To tax gains currently, the estate administrator would need to know the basis (from the decedents' records) and the price for certain assets (such as business assets and real estate). In many cases, one or both pieces of information may be difficult to obtain. In addition to valuation problems, the estate might not have enough cash on hand to pay the tax (especially if this change were in conjunction with taxing capital gains at ordinary rates). Past proposals and reforms that required the heir to use the original purchase price rather than market value at death, have ultimately been suspended shortly after or even before they took effect. The most recent example, enacted in 2001, would have had the capital gains provision taking effect in 2010. It was changed by the Tax Relief, Unemployment Insurance Reauthorization, and Job Creation Act of 2010 (P.L. 111-312), which allowed heirs of decedents dying in 2010 to elect how the capital gains would be taxed. The estate could elect no estate tax and use the original purchase price for gains, or continue step-up in basis and pay an estate tax (with a \$5 million exemption).

The 13<sup>th</sup>-largest tax expenditure, the exclusion of inside buildup on life insurance and annuities (the earnings on premiums), is a benefit that can be determined actuarially, but the individual taxpayer does not actually receive the income. Consequently, changing the tax treatment would require taxation on an accrual basis rather than on a realization basis. The extent to which this might cause cash flow difficulties for the investor depends on how large the annuity appreciation is relative to other income. This problem is a little more tractable, however, since a withholding tax could be imposed on the insurance company and the taxpayer could take a credit for it, much as is done with wage withholding. It would add complexity to the tax form, however.

#### Other Tax Expenditures

Among the smaller tax expenditures, one of the larger ones is miscellaneous fringe benefits, which has valuation problems as well. Consider the example of an employee discount for clothing in a retail store. Should the discount be measured relative to the regular price or a sales price? Does the employee enjoy the full value or do they feel pressured to wear the store's clothing? To what extent is the discount a benefit for the store? If the company has a gym, even if the firm can allocate the cost, some employees don't use a gym at all, some use it occasionally, and some intensively. How is this usage to be tracked? Is the benefit of the gym as valuable to the employees as it costs the firm?

#### Public Attitudes Towards Tax Reform

Many tax expenditures enjoy strong public support of these provisions. For many large tax expenditures, survey respondents (from samples of U.S. adults) support maintaining these tax

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<sup>&</sup>lt;sup>73</sup> The current method of using the market value at the time of death as the basis is referred to as step-up in basis. Using the price the decedent paid is referred to as carry-over basis.

breaks even if the elimination of the provisions allowed for reducing tax rates. For example, only 30% of survey respondents support eliminating the deduction for state and local taxes in return for lower tax rates. The percentage of respondents supporting the elimination of other tax provisions in return for lower tax rates are charitable deductions, 26%; exclusion of employer provided health insurance, 40%; child care expenses, 46%; and exclusion of 401(k) contributions, 39%.

Public support for the mortgage interest deduction, however, is not so straightforward. Overall, 93% of respondents think continuing the mortgage interest deduction is very important (63%) or somewhat important (30%).<sup>79</sup> Furthermore, only one-third of respondents support eliminating or reducing the deduction in exchange for reducing the deficit.<sup>80</sup> However, almost half of the respondents would exchange the mortgage interest deduction for lower tax rates,<sup>81</sup> and 50% support eliminating the mortgage interest deduction for mortgages over \$500,000 and for second homes.<sup>82</sup>

Less than half of survey respondents (48%) reported they favor eliminating all tax deductions in return for lower tax rates, 83 even though only one-third of taxpayers claims these deductions. Many of the largest tax expenditures enjoy the support of the majority of the adult population. The only large tax expenditure that is not supported by a majority is reduced tax rates on capital gains—54% of survey respondents think it is totally acceptable (17%) or mostly acceptable (37%) to increase the capital gains tax rate as a way to reduce the federal deficit. 84

# **Concluding Remarks**

The analysis in this report suggests there are impediments to base broadening by eliminating or reducing tax expenditures, because they are viewed as serving an important purpose, are important for distributional reasons, are technically difficult to change, or are broadly used by the public and quite popular.

The savings incentives account for almost 30% of the total revenue loss of all tax expenditures (\$334 billion), but it may be difficult to repeal or scale back these provisions in any significant way. Many groups expressing support for tax reform nevertheless believe it is important to avoid changes that will increase the overall tax on savings. In fact, many would like to move to a system without any taxation of capital income. Moreover, modification of many of the savings incentives faces significant technical or administrative barriers. Most of these tax benefits are

 $^{76}\ Bloomberg\ Poll,\ June\ 2011,\ http://www.bloomberg.com/news/2011-06-22/americans-worse-now-than-when-obamainaugurated-by-44-34-margin-in-poll.html.$ 

78 Ibid.

<sup>79</sup> CBS News/New York Times Poll, June 2011, http://www.cbsnews.com/8301-503544\_162-20075544.html.

<sup>&</sup>lt;sup>74</sup> Gallup Poll, April 2011, http://www.gallup.com/poll/147125/Americans-Oppose-Eliminating-Income-Tax-Deductions.aspx.

<sup>75</sup> Ibid.

<sup>77</sup> Ibid.

<sup>80</sup> Gallup Poll, April 2011.

<sup>81</sup> Bloomberg Poll, June 2011.

<sup>82</sup> ABC News/Washington Post Poll, December 2010, http://abcnews.go.com/story?id=12394216.

<sup>&</sup>lt;sup>83</sup> Bloomberg Poll, September 2011, http://www.bloomberg.com/news/2011-09-14/obama-approval-drops-on-skepticism-of-jobs-plan.html.

<sup>&</sup>lt;sup>84</sup> NBC News/Wall Street Journal Poll, December 2010, http://online.wsj.com/article/ SB10001424052748704828104576021900230935000.html.

associated with unrealized income (pension benefits, including those associated with defined benefit plans, unrealized gains at death, and inside buildup in insurance plans), which can be difficult or impossible to value properly. Raising capital gains tax rates on realized capital gains may not be considered a significant revenue raiser because of current revenue scoring conventions. Furthermore, since the tax benefits of savings incentives are more concentrated among higher income individuals, it would be quite difficult to reduce the top rates while maintaining distributional and revenue neutrality without turning to these provisions.

Some other large tax expenditures, notably the exclusion of employer health insurance and the exclusion of Medicare, which account for 20% of the total revenue loss of all tax expenditures (\$240.4 billion), are also in-kind benefits that are not easily valued. Modifying the health insurance exclusion was considered during the 2010 debate over health reform but was not changed (an excise tax on high cost plans was adopted) as it became clear that a fair imputation of income was probably impossible. Medicare faces even more severe valuation problems and is one of the provisions most beneficial to lower-income taxpayers. A number of smaller tax expenditures, relating to fringe benefits, also face difficult measurement problems.

Other tax expenditures that benefit lower-income taxpayers could be difficult to revise. The most progressively distributed tax provision is the earned income credit, with benefits highly concentrated among lower-income individuals. Since individuals with little or no tax liability receive most of the tax benefits, the earned income credit could not be changed in a way that maintains both revenue neutrality and distributional neutrality. Taxing Social Security benefits that are currently not taxed would also fall heavily on lower-income individuals. The floor on the deduction for medical expenditures, which protects individuals with catastrophic costs, is high by historical standards and was recently increased. Lastly, there appears to be bipartisan support to extend the larger tax benefits of the child credit that were enacted by the Bush tax cuts. These specific tax expenditures account for 11% of the total revenue loss of all tax expenditures (\$132.7 billion).

Another tax expenditure that may be difficult to reduce is the capital gains exclusion for owner-occupied housing (\$27.2 billion or 2.3% of the total), which has historically not been subject to tax and could lead to some significant distortions (e.g., discouraging labor mobility) and inequities.

These tax expenditures account for over 60% of the revenue loss of all tax expenditures. But even among the remaining provisions, the scope of revision could be limited. For example, the major itemized deductions (mortgage interest, state and local taxes, charitable contributions), which account for a fifth of the total revenue loss of all tax expenditures (\$232.5 billion), are broadly used provisions and it could be difficult to eliminate or significantly curtail them because of public attitudes towards these provisions.

Given the barriers to eliminating or reducing most tax expenditures, it may prove difficult to gain more than \$100 billion to \$150 billion in additional tax revenues through base broadening. This amount could have a significant effect on reducing the FY2014 budget deficit—reducing the projected \$345 billion deficit by 30% to 43%. This additional tax revenue, however, is equivalent to about 6% to 9% of projected FY2014 individual income tax, and, consequently, would not allow for significant reductions in tax rates (about a one or two percentage point reduction for each bracket).

# Appendix A. Classification of Tax Expenditures by Category

This appendix lists the particular tax expenditures classified into categories. 85

Savings: Includes capital gains rates, tax treatment at death and by gift, exclusion on small business stock, deferral for Section 1256 contracts, exclusion of investment income on life insurance and annuities, deferral of tax on non-dealer installment sales, deferral of tax on like-kind exchanges, the new markets tax credit, tax treatment of employee stock ownership plans and stock options, exclusion of stock redemptions to pay estate taxes, tax benefits for pensions (both employer and self employed), and individual retirement accounts. Also includes lower rates for dividends when considering extension of expiring tax benefits.

Business: Includes expensing of research and development costs, all provision in energy, natural resources and agriculture except for tax exempt bonds and the residential energy efficiency credit, provisions relating to rental housing and credits for structures, all provisions in the subcategory "other business and commerce," other than capital gains provisions included in savings and tax exempt bonds, renewal community incentives, and District of Columbia tax incentives. Note that the research credit expired at the end of 2011, but is negligible for individuals.

Owner-Occupied Housing: Includes mortgage deduction, property tax deduction, exclusion of capital gains on owner-occupied housing, and residential energy efficiency credits.

Consumption: Classified into three subcategories, with the exception of the employer exclusion of life and accident insurance.

Health: All of the provisions under the health functional category except for charitable contributions and tax exempt bonds, plus cafeteria plans which are largely used to pay for the employee's share of health plans.

Education: All of the provisions under the education sub-function, except for tax exempt and tax favored bonds, and charitable contributions.

Charity: Charitable contributions (all three categories: general, education, and health).

Labor Supply: Includes exclusion for income earned abroad, employer transportation benefits, minister's housing allowance, fringe benefits, employee awards, income earned by beneficiary associations, exclusions for child and dependent care, earned income credit.

Government: Includes exclusions of various benefits and payments for the armed services and federal civilian employees working abroad, all tax exempt bonds (private activity and general obligation), tax deductions (except property tax), exclusion for transfers under government programs (Social Security, Medicare, Veteran's benefits, workers compensation, benefits for disabled coal miners, cash public assistance), deferral of interest on savings bonds,

Structural: Includes disaster relief, child credit, exclusion of damages on account of personal physical injuries, disaster relief, and the additional standard deduction for the blind and the elderly.

<sup>&</sup>lt;sup>85</sup> For a description of each tax expenditure see U.S. Senate, Committee on the Budget, *Tax Expenditures: Compendium of Background Material on Individual Provisions*, December 2010, http://www.gpo.gov/fdsys/pkg/CPRT-111SPRT62799/pdf/CPRT-111SPRT62799.pdf.

# Appendix B. Data and Methods

Two nationally representative data files are used in the analysis to estimate the progressivity of selected tax expenditures.

#### 2006 Public Use Tax File

The first source of data is the 2006 Internal Revenue Service (IRS) Statistics of Income (SOI) Public Use File. The Public Use File is a nationally representative sample of tax returns for the 2006 tax year. To protect the identity of individual taxpayers while preserving the character of the data, the IRS made changes to the data. Consequently, while reliable aggregate information can be obtained, individual taxpayer records in the data may or may not contain information from just one tax return. The unit of analysis is the tax return for a taxpayer, and IRS-provided sample weights are used throughout the analysis. The analysis sample contains information for 130,438 taxpayers (representing 122.7 million taxpayers).

#### 2007 Survey of Consumer Finances

The second source of data is the Federal Reserve Board's 2007 Survey of Consumer Finances (SCF). The SCF is a wealth survey, but also includes employment and income information for households in the sample. The SCF is used to estimate the Suits index for tax benefits of 401(k)-type pension plans, IRAs, employer provided health insurance, and Medicare benefits. Both 401(k) contributions and account balances as well as IRA account balances are reported in the SCF. In estimating the tax benefits of 401(k) and IRA earnings, it is assumed that the rate of return on the account balances is 6%.

Neither the value of Medicare benefits nor the premium for employer provided health insurance is reported in the SCF. For each person in a household reporting Medicare coverage, the national expenditure per beneficiary (Part A only) is used as the value of benefits that are not taxed. For each person in a household covered by employer provided health insurance, the employer paid premium by firm size and industry is used as the value of the health insurance benefit that is not taxed. The premium data come from tabulated statistics of the Medical Expenditure Panel Survey by the Agency for Healthcare Research and Quality.

#### The Suits Index

The progressivity measure used in the analysis is the Suits index, which was originally developed to measure tax progressivity. 86 The Suits index can be calculated using concentration curves, which are shown in **Figure B-1**, **Figure B-2**, and **Figure B-3**. The horizontal axis of the concentration curve measures the cumulative percent of income from poorest to richest. For example, the first 15% of cumulative income is the income reported by the poorest 50% of taxpayers in the sample. The vertical axis measures the cumulative percent of tax benefits of a tax expenditure. If the concentration is above the diagonal line in the figures, then the tax benefits tend to accrue to lower-income taxpayers. If the concentration is below the diagonal line, then the tax benefits tend to accrue to high-income taxpayers.

<sup>&</sup>lt;sup>86</sup> Daniel B. Suits, "Measurement of Tax Progressivity," *American Economic Review*, vol. 67, no. 4 (September 1977), pp. 747-752.

Define two areas in the figures. The first area is the area below a concentration curve; call this area A. The second is the area below the diagonal line in the figures; call this area B. The Suits index is:

$$S = -1 + \frac{A}{B}.$$

The Suits index varies between -1 (a completely regressive tax benefit where area A is zero) to +1 (a completely progressive tax benefits where area A is twice area B). A Suits index of zero is for a proportional tax benefits (area A = area B).

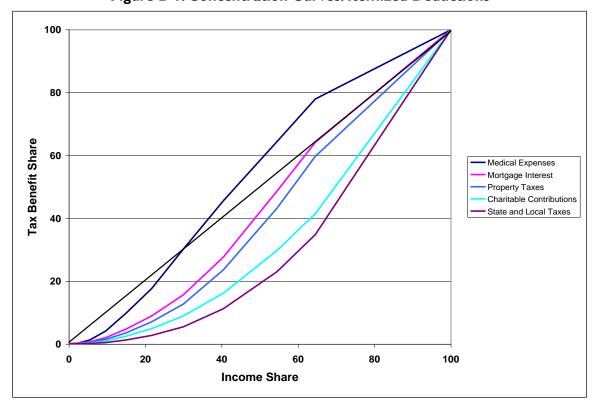


Figure B-I. Concentration Curves: Itemized Deductions

**Source:** CRS analysis of 2006 IRS Statistics of Income Public Use File.

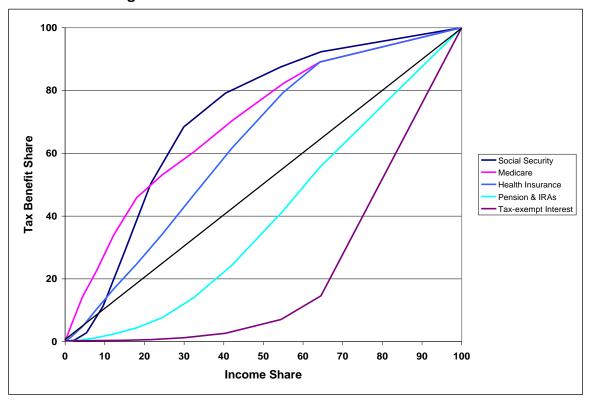


Figure B-2. Concentration Curves: Income Exclusions

**Source:** CRS analysis of 2006 IRS Statistics of Income Public Use File and 2007 Survey of Consumer Finances.

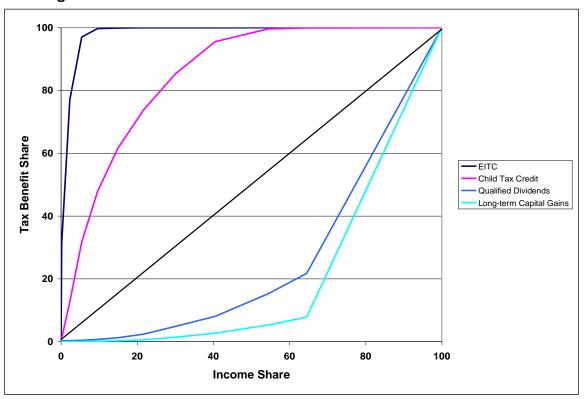


Figure B-3. Concentration Curves: Tax Credits and Preferential Tax Rates

**Source:** CRS analysis of 2006 IRS Statistics of Income Public Use File.

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